CLAIMS:

1. Receiver (1,11) comprising
- a receiving stage (2,12) for receiving frequency signals;
- a mixing stage (3,13) coupled to the receiving stage (2,12) for generating converted frequency signals;
- a modulating stage (4,14) coupled to the mixing stage (3,13) for delta-sigma modulating the converted frequency signals; and
- a filtering stage (5,15) coupled to the modulating stage (4,14) for filtering the delta-sigma modulated converted frequency signals.

2. Receiver (1,11) as defined by claim 1, wherein the modulating stage (4,14) comprises a delta-sigma modulator (41,42,43,90) comprising
- a low-pass filter (91);
- a quantiser (92) coupled to the low-pass filter (91); and
- a digital-to-analog converter (93) for feeding back an output of the quantiser (92) to an input of the low-pass filter (91).

3. Receiver (1,11) as defined by claim 2, wherein the low-pass filter (91) comprises a time-continuous filter.

4. Receiver (1,11) as defined by claim 1, further comprising
- a further mixing stage (6,16) coupled to the filtering stage (5,15) for generating baseband signals; and
- a further filtering stage (7,17) coupled to the further mixing stage (6,16) for channel selective filtering the baseband signals.

5. Receiver (1) as defined by claim 1, wherein the mixing stage (3) comprises a mixer (32), and the modulating stage comprises a delta-sigma modulator (41).

6. Receiver (11) as defined by claim 1, wherein the mixing stage (13) comprises a first mixer (34) for generating in-phase signals and a second mixer (35) for generating quadrature signals, and the modulating stage (14) comprises a first delta-sigma modulator (42) for delta-sigma modulating the in-phase signals and a second delta-sigma modulator (43) for delta-sigma modulating the quadrature signals.

7. System (100) comprising a transmitter (101) and comprising a receiver (1,11) which comprises

- a receiving stage (2,12) for receiving frequency signals;
- a mixing stage (3,13) coupled to the receiving stage (2,12) for generating converted frequency signals;
- a modulating stage (4,14) coupled to the mixing stage (3,13) for delta-sigma modulating the converted frequency signals; and
- a filtering stage (5,15) coupled to the modulating stage (4,14) for filtering the delta-sigma modulated converted frequency signals.

8. Modulating/filtering stage (10,20) for use in a receiver (1,11) comprising

- a receiving stage (2,12) for receiving frequency signals;
- a mixing stage (3,13) coupled to the receiving stage (2,12) for generating converted frequency signals;
- the modulating/filtering stage (10,20) comprising a modulating stage (4,14) coupled to the mixing stage (3,13) for delta-sigma modulating the converted frequency signals and a filtering stage (5,15) coupled to the modulating stage (4,14) for filtering the delta-sigma modulated converted frequency signals.

9. Method for receiving frequency signals and comprising the steps of

- generating converted frequency signals;
- delta-sigma modulating the converted frequency signals; and
- filtering the delta-sigma modulated converted frequency signals.

10. Processor program product for receiving frequency signals and comprising the functions of

- generating converted frequency signals;
- delta-sigma modulating the converted frequency signals; and

- filtering the delta-sigma modulated converted frequency signals.